Summary of all Australian blackleg monitoring sites for 2021

The 2021 blackleg monitoring site results are presented within this document. An explanation of the colour key is found on the following page and suggested management strategies are provided. The below information applies to all regions and cultivars.

General information:

Background:

- Blackleg disease can be minimised by a number of factors including: sowing cultivars with high blackleg resistance; avoiding sowing canola in close proximity to last year's stubble; and applying fungicides; use BlacklegCM App to estimate your risk; see the current Blackleg Management Guide for details - www.grdc.com.au.
- An additional method for minimising disease is rotating cultivars with different resistance genes.
- All canola cultivars are classified into different resistance groups based on their resistance genes. Refer to the current Blackleg Management guide (www.grdc.com.au) for resistance groups for individual cultivars.
- Cultivars representing each of the resistance groups are sown at 30 trials across Australia and monitored for levels of blackleg disease. These data indicate which resistance groups have higher levels of disease compared to the other resistance groups at the same location.

The data used to generate the recommendations within this document reflect the **virulence profile** of the blackleg fungal population at the **blackleg monitoring site(s) assessed from this region ONLY** and may be different to the blackleg population on your individual farm. The level of blackleg in your crop is influenced by the cultivars that you and your neighbours have sown over the past 3 years. However, the provided data can be used as a guide as to which resistance genes are effective and which are not in your region.

Colour Key for monitoring sites:

Low blackleg severity compared to other groups at that site – continue with current management strategy.

In the blackleg monitoring sites for this region there was LOW blackleg severity in this group compared to other resistance groups. This suggests that major gene resistance is still effective, and disease is unlikely to develop on cultivars from this resistance group when grown in this region.

When effective, major genes provide complete disease control (immunity) to all plant parts. Therefore, cultivars from this resistance group grown in this area are likely to be protected from both crown canker and upper canopy infection.

Moderate blackleg severity compared to other groups at that site – monitor crops for disease, see the Blackleg Management Guide for management options.

In the blackleg monitoring sites from this region there was MODERATE blackleg severity in this resistance group compared to other resistance groups. The data suggests that the major gene resistance in cultivars from this resistance group may not be effective.

If you have a partially effective major gene resistance it is crucial to monitor your crops for crown canker and upper canopy infection in spring to determine what level of disease you are getting in your cultivars (consult the Blackleg Management Guide on details of how to monitor your crop).

If you are growing a cultivar from this group with partially effective major gene resistance, you may get crown canker. The level of crown canker will depend on seasonal conditions and the blackleg rating of your cultivar. The Blackleg Rating is likely to reflect the presence or absence of quantitative resistance (crown canker specific resistance) and therefore choose a cultivar with an appropriate Blackleg Rating for your region. For example, cultivars with a rating of MR or above are usually appropriate for higher disease severity regions; use BlacklegCM App to determine the risk of economic loss for the specific blackleg rating (R to S) of your chosen cultivar sown in your paddock.

Cultivars of this resistance group may also be susceptible to upper canopy infection. If your cultivar flowers early and blackleg is present your crop may get upper canopy infection. Consider seeking professional advice during the season to determine whether fungicide control may be warranted.

High blackleg severity compared to other groups at that site – high risk of yield loss if environmental conditions are conducive to high disease severity – see the Blackleg Management Guide for management options.

In the blackleg monitoring sites from this region there was HIGH blackleg severity in this resistance group compared to other resistance groups. The data suggests the major gene resistance in cultivars from this resistance group may be ineffective in this region.

When major gene resistance is overcome, cultivars become reliant on quantitative resistance to minimise crown canker. The level of crown canker will depend on seasonal conditions and the blackleg rating of your cultivar. The Blackleg Rating is likely to reflect the presence or absence of quantitative resistance (crown canker specific resistance) and therefore choose a cultivar with an appropriate Blackleg Rating for your region. For example, cultivars with a rating of MR or above are usually appropriate for higher disease severity regions; use BlacklegCM App to determine the risk of economic loss for the specific blackleg rating (R to S) of your chosen cultivar sown in your paddock.

Cultivars of this resistance group may also be susceptible to upper canopy infection. If your cultivar flowers early and blackleg is present your crop may get upper canopy infection. Consider seeking professional advice during the season to determine whether fungicide control may be warranted.

Insufficient data – no recommendations available.

2021 Site recommendations

Site	Resistance Group						
NSW	**A**	**B**	**C**	**BF**	**AD**	**ABDF**	**H**
Beckom							
Condobolin							
Cootamundra							
Cudal							
Gerogery							
Grenfell							
Lockhart							
Parkes							
Wagga Wagga							
Wellington							
SA	**A**	**B**	**C**	**BF**	**AD**	**ABDF**	**H**
Arthurton							
Cummins							
Keith							
Riverton							
Spalding							
Wangary							
Wasleys							
Yeelanna							
Vic	**A**	**B**	**C**	**BF**	**AD**	**ABDF**	**H**
Charlton							
Diggora							
Hamilton							
Horsham							
Kaniva							
Lake Bolac							
Wunghnu							
Yarrawonga							
WA	**A**	**B**	**C**	**BF**	**AD**	**ABDF**	**H**
Bolgart							
Gibson							
Kendenup							
Kojonup							
Munglinup							
Stirlings South							
Wagin							
Williams							